DETAILED COMMENTS ON BEHALF OF THE CITY OF COEUR D'ALENE
NPDES PERMIT NO. ID-002285-3
MAY 17, 2007

I. Introduction

The Draft permit's final effluent limitations for ammonia during the months of July, August and September are not consistently achievable without substantial capital improvements. The City of Coeur d'Alene (City) is committed to those improvements in order to achieve compliance with ammonia, CBOD5 and phosphorus limits applicable to other times of the year. It is essential that EPA allow for a nine year compliance schedule with interim conditions for summer ammonia concentrations in order for the City to have a reasonable opportunity to attain compliance. Without a compliance schedule, the City will most likely not be able to consistently achieve the summer ammonia limits as early as the summer of 2007 and every summer thereafter, pending the treatment plant improvements that will be made over the next nine years.

Coeur d'Alene accordingly requests that EPA and the State of Idaho Department of Environment Quality (DEQ) grant a nine year compliance schedule for the final summer ammonia limits. In the alternative, the City requests that EPA issue the permit with a different combination of limits that will constitute new permit limits subject to a compliance schedule. One of these options is necessary to prevent the issuance of a permit with which the City cannot comply during the permit term.

II. Ammonia Limits

Section I.B., Table 1 of the draft permit sets final effluent limits for Total Ammonia as N for the months March through October. Section I.D.7, Table 3 sets forth a compliance schedule for the ammonia limit for March through June and October. The final effluent limitation for July through September is not reasonable and is not immediately achievable. The City accordingly requests that EPA recognize that it made a technical mistake and mistaken legal interpretations when setting the ammonia limits in the 2004 permit modification and allow for a reasonable compliance schedule to achieve compliance with the limits from July through September. In the alternative, the City requests that the final permit include a different combination of limits to achieve water quality criteria in Washington for dissolved oxygen (DO), together with a compliance schedule to meet the new limits. The purpose of the alternative limits is to allow DEQ to authorize a compliance schedule for the new limits consistent with the nine year compliance schedule proposed for other new limits in the Draft permit for ammonia and other limits in the permits set to avoid causing or contributing to nonattainment of DO standards in Washington State.

A. The Final Effluent Limitations for Ammonia in the Draft permit Should be Subject to A Compliance Schedule

In 2004, EPA improperly retained summer ammonia effluent limitations in the

City's permit without considering whether the ammonia limits could be less stringent and still meet Washington water quality standards. EPA acted arbitrarily in determining that 2004 limits were necessary to avoid causing or contributing to Washington state water quality standards because the agency did not follow an appropriate process to set effluent limits based on downstream impacts. The 2007 Draft permit perpetuates this error by proposing the same effluent limitations. Allowance of a compliance schedule would resolve a technical and legal mistake made in 2004 and, as such, would not be subject to the prohibition on backsliding under Section 402(o).

The current permit limits for ammonia were originally established in the City's 1999 permit. At that time, the limits were based on compliance with Idaho water quality standards for ammonia toxicity. App. A, 1999 Permit Fact Sheet, at C-11 through C-13. In 2004, the City requested a modification to the ammonia limits in the 1999 permit based on new information that discharges from the City's treatment plant would not cause or contribute to a violation of applicable water quality standards for ammonia toxicity in Idaho. EPA initially issued a draft permit modification that would have removed ammonia limits for the months of July, August and September based on the information provided by the City. App. B, 2004 Permit Modification Fact Sheet, at C-14.

In response to comments from the State of Washington on the draft permit modification, EPA purported to use a model developed by Washington for a TMDL that was never adopted. The Washington Department of Ecology had requested that EPA conduct an evaluation of the far field impacts on DO prior to modifying the effluent limits for ammonia.

Using that model, EPA concluded that the 1999 effluent limitations for ammonia would meet downstream water quality criteria for DO in Washington. On this basis, EPA concluded that the ammonia limits should be retained in the permit.

> For the summer months, the model indicates that there is a significant/measurable difference in dissolved oxygen concentrations when the facility is discharging at the maximum reported ammonia concentrations compared to ammonia concentrations on 0 and 21 mg/L. Given these results, the final permit modification will retain the current ammonia limits for the summer months.

App. C, 2004 Response to Comments, at 2.

EPA did not, however, evaluate whether less stringent ammonia effluent limitations would also be protective of downstream water quality for DO in Washington. App. C at 1-2. The City did not have an opportunity to comment on the limits imposed by EPA to comply with downstream DO standards or the process followed by EPA to make this determination, or the opportunity to request a compliance schedule to meet these limits. Also, DEQ did not have an opportunity to review these limits in order to determine whether a compliance schedule should be issued.

In the 2007 draft permit, EPA has again erroneously modeled the 1999 effluent limitations based on Idaho water quality standards for ammonia toxicity to determine compliance with Washington DO standards without assessing whether other and more appropriate effluent limitations would meet these standards. To correct this mistake, EPA should allow for a 9-year compliance schedule to meet the final ammonia limits for discharges during the summer.

The foregoing reassessment and modeling should be viewed as new information under Section 402(o) of the Clean Water Act. EPA accepted Hayden's 2006 application as providing "new information" for the purposes of section 402(o) of the Clean Water Act. The 2007 draft permit for Hayden proposed revising the current Hayden permit conditions, which prohibit all summer discharges, to allow summer discharges with a new effluent limitation for ammonia. EPA considers the allowance of limits for ammonia where there previously were none allowed to be allowed under the "new information" exception to anti-backsliding prohibitions. App. D, Hayden Draft Fact Sheet, at 22. EPA should follow a similar analysis here.

B. Proposed final limits for Ammonia and CBOD

In the event that EPA is unwilling to allow for a reasonable compliance schedule for the ammonia limits in the draft permit, the City requests, in the alternative, a new combination of limits to meet water quality standards that will qualify for a compliance schedule. The proposed combination of limits would be an increase in total ammonia for the months July through September from 7.4 mg/L to 15 mg/L, and a reduction in the limit for five-day carbonaceous biochemical oxygen demand (CBOD) during the same from 15 mg/L to 7.5 mg/L, These values represent more achievable limits for the City's current treatment facility and are equally protective of the DO water quality criteria in Lake Spokane.

The City's request for modification of the final effluent limitation for Ammonia and CBOD is based on new information and responds to the request for information in the Draft Fact Sheet. In the draft Fact Sheet, EPA stated:

> EPA acknowledges that the effluent limits proposed are not the only combination of limits that would prevent the Idaho dischargers from causing nonattainment of Washington's water quality standards. If EPA is presented with information during the public comment period demonstrating that a different combination of effluent limits could be imposed such that are derived from and comply with the water quality standards of both States, EPA will consider this information in its decision on final effluent limits, and may revise the final effluent limits accordingly.

Draft Fact Sheet, at C-7.

Alternative ammonia limits are necessary because the City will have significant difficulty in meeting the Draft permit limit for ammonia from July through September until its treatment plant is upgraded to meet the new, lower total phosphorus limits in the draft permit. *See* D. Clark and M. Kasch, *Memorandum re: Coeur d'Alene Draft NPDES Permit: Ammonia* (HDR 2007a). App. E. The City retained HDR to consider alternative combinations of limits that are more achievable and will meet water quality standards. *Id*. HDR employed the same CE-QUAL-W2 models of the Spokane River as documented in *Assessment of the Water Quality Impacts of Idaho wastewater Treatment Plants on the Spokane River and Long Lake* (EPA 2006). Within that document, EPA stated that it did not have the time or resources to simulate many scenarios. *Id*.

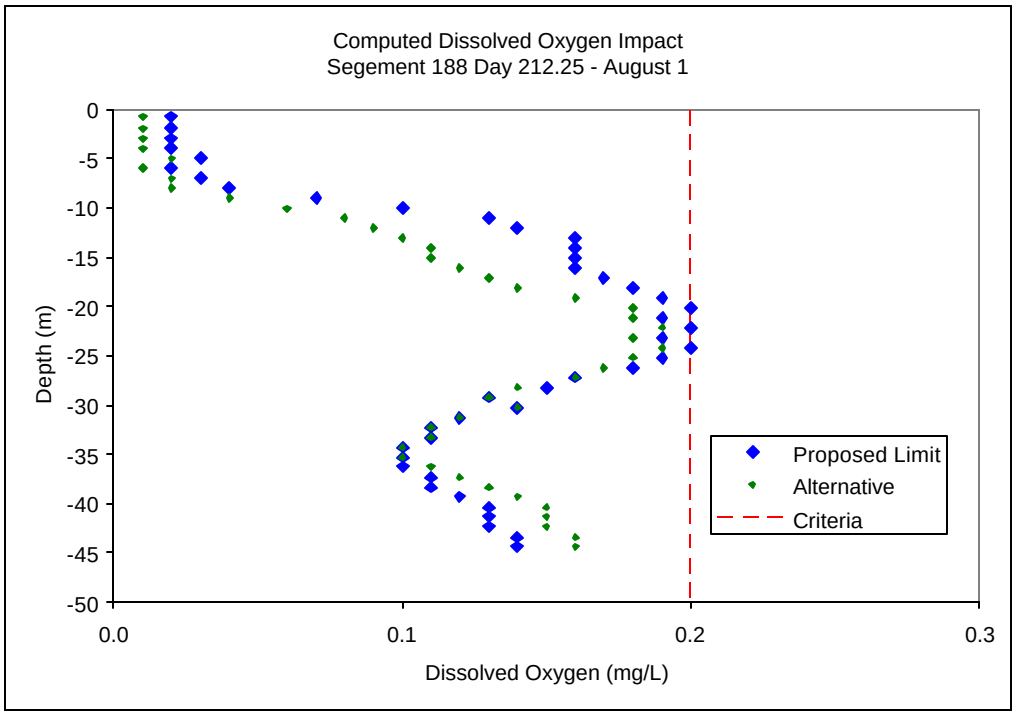
HDR varied the EPA model by adjusting the ammonia limit and CBOD limit during the months of July through September. *Id*. The HDR adjustments to the model project DO impacts to Long Lake (Lake Spokane) that are nearly identical to the projected impact from the model using the Draft permit effluent limits. *Id.*

The following table presents a comparison of the model results obtained by EPA and the results using the model with the revised effluent limitations requested by the City. Table 1 compares the results of the changes in this scenario with the EPA Region 10 report (Model Runs #1 through 6), where Model Run No. 6 was the basis for the Draft permit limits. The Model Run No. 6 DO depression in Long Lake was right at the threshold of the standard at 0.199 mg/l. The results from the Alternative scenario are also below 0.2 mg/L.

Table 1. Results of Spokane River Simulations

#	Scenario	Facility	Average Discharge Concentrations			Long Lake Dissolved Oxygen Impact	
			Total Phosphorus (µg/l)	Ammonia (mg/l)	CBOD 5 (mg/l)	Mean	95th Percentile
1	Natural Condition	None	0	0	0	Baseline	
2	Permit	CdA	1400	7.4	25	0.43	1.11
3	2001	CdA	760	3.3	3.9	0.12	0.27
4	Test_A	CdA	3200/50/50	7.4	10	0.14	0.21
5	Test_B	CdA	50/50/50	7.4	10	0.09	0.14
6	Limit	CdA	1000/250/50	7.4	10	0.125	0.199
Alt. A	Ammonia 15 BOD5 7.5	CdA	1000/250/50	15	7.5	0.133	0.200

The following figure illustrates that the requested effluent limitations will meet the State of Washington water quality criteria for aquatic life DO at WAC 173-201A-200(1)(d):



The foregoing demonstrates that the City's proposed effluent limitations are valid alternative combinations of limits to meet Washington water quality standards.

The effluent limitations proposed by the City ensure compliance with applicable water quality standards consistent with section 402(o)(3) of the Clean Water Act, 40 CFR § 122.4(d). Ammonia discharges from the City treatment plant are not currently causing or contributing to a violation of Idaho water quality criteria for ammonia at the point of discharge. The City's proposed final limits will ensure that discharges from its treatment plant will continue to attain Idaho water quality standards. As demonstrated by the HDR model, the limits proposed by the City will also result in compliance with downstream water quality criteria in Washington. Specifically, the HDR-modeled impacts do not indicate a decrease in DO of more than 0.2 mg/L below natural conditions as required by WAC 173-201A-200.

As such, the City's proposed effluent limitations do not violate the anti-backsliding provisions in Section 402(o) of the Clean Water Act. 33 U.S.C. § 1342(o). That section prohibits the issuance of a permit that contains effluent limitations less stringent than a previous permit. The City's proposed limits are not less stringent. They represent a different combination of limits that result in the same level of protection for down stream water quality. To the extent this section does apply, EPA should nonetheless accept the proposed limits under the statutory exceptions to the anti-backsliding prohibition including the exceptions under section 402(o)(2)(B). These

exceptions to 402(o) are available when there is new information that was not available which would justify the application of less stringent effluent limitation, there was a technical mistake or mistaken interpretation of the law.

The information contained in the HDR memorandum attached as Appendix E should be considered new information within the meaning of Section 402(o)(2)(B)(i). This information consisting of alternative scenarios for downstream impact modeling was not available at the time of permit issuance in 2004 and would have justified the application of a less stringent effluent limitation for ammonia at that time.

If EPA accepts the City's proposed combination of limits, it is essential that the new limits be afforded a reasonable compliance schedule. The City has requested that DEQ's final Section 401 certification provide for a nine year compliance schedule to achieve the new limits proposed for ammonia and CBOD for the months of July, August and September. Idaho's compliance schedule statute allows for a compliance schedule for new permit limits. IAC 58.01.02-400.03 ("Discharge permits for point sources may incorporate compliance schedules which allow a discharger to phase in, over time, compliance with water quality-based effluent limitations when new limitations are in the permit for the first time.") The limits proposed by the City are new because they increase the limit for ammonia and reduce the limit for CBOD.

While the City's proposed effluent limits are more achievable by its current treatment facility, compliance with the new limits will be dependent upon the same factors that support the nine year compliance schedule for other months. (See Section III below.) These factors include the fact that City needs a reasonable period of time to install new treatment processes to attempt to meet the other DO-dependent limits for phosphorous and CBOD5.

III. Questions regarding modeling assumptions

A. Modeling Assumptions Used to Meet Washington DO Criteria

The City has the following comments regarding the model used to derive permit effluent limits to meet Washington water quality criteria for DO:

1. EPA should explain in more detail how the assumptions made for determining the appropriate loads for DO parameters and associated permit limits for ammonia, CBOD5 and phosphorous will not cause or contribute to downstream water quality standards non-attainment in Washington State portions of the Spokane River and Lake Spokane.

2. EPA should explain if its model assumptions are the same as the assumptions in the Washington DO TMDL model for upstream waste load allocations.

3. EPA should more fully explain how the limits in the draft permit ensure compliance with the applicable water quality requirements of all affected states as required in 40 CFR § 122.4(d).

4. EPA should provide a better explanation of its rationale for ensuring that the draft permit limits will not cause nonattainment of Washington State DO standards and any other Washington State standards applicable to the permit limits.

5. EPA should also explain whether a revision to TMDL model assumptions used by Washington State would impact EPA's derivation of the limits in the draft permit.

6. EPA should disclose whether the Washington State Department of Ecology concurs with EPA's determination and whether there is any documentation of such concurrence.

B. Loading Assumptions for Idaho Dischargers

EPA bases its calculation of permit limits for the three Idaho wastewater treatment plants on a model that looks at the collective impact of the three facilities. As long as the total load of a constituent for the three Idaho dischargers is the same as the modeled loads, then the DO impact in Lake Spokane should be similar (0.2 mg/L), with one exception. Since the three dischargers are not in the same location, the processing times in the river are different. If the loads were shifted to different locations, the model DO results would show some variance, but would likely still be near 0.2 mg/L.

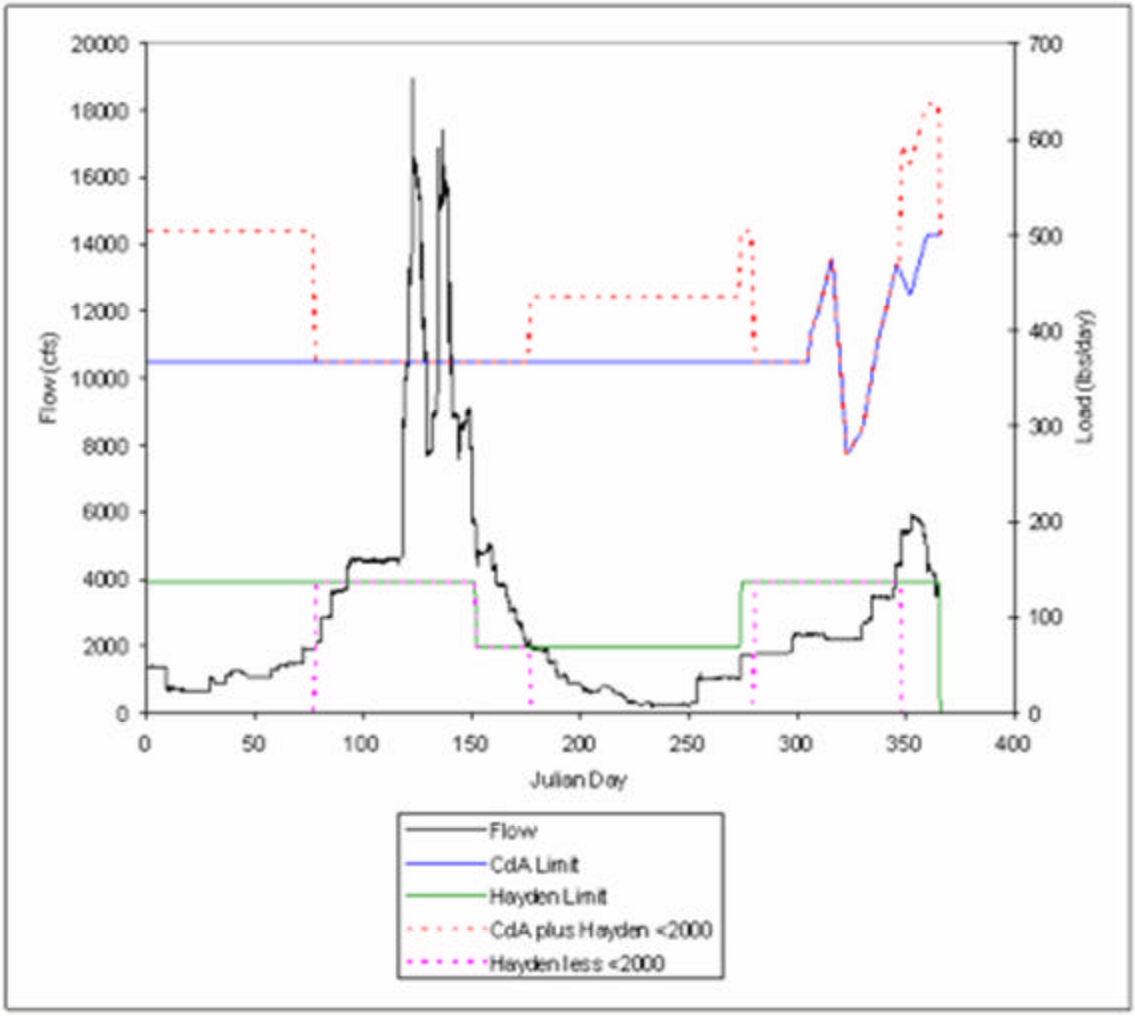
EPA could revise the final effluent limits for all three treatment plants and still achieve the modeled DO level. Calculated loads for ammonia, CBOD5 and phosphorous, for example, could be allocated to the City to allow for less stringent limits. It is not clear whether EPA considered any alternative loading allocation scenarios or how it selected the load allocations for each of the three treatment plants. It is difficult to propose alternative scenarios in the absence of this information.

The City has looked at one alternative scenario. The current permit for Hayden prohibits any discharge when river flows are less than 2,000 cfs. The river flows in 2001 were less than 2,000 cfs from January 1 through March 19 and from June 26 through October 24. If the Hayden permit retained its current permit limit of zero discharge during this flow events, the equivalent of Hayden's load during these periods could be added to the Coeur d'Alene load, the approximate concentration results for Coeur d'Alene would be: 7.4 to 10.2 mg/L January through March and 7.4 to 8.78 mg/L from June through October.

Projected flows in the Spokane River may be less than 2,000 cfs in late winter and during the summer. If Hayden was restricted from discharging its load during these periods, these loads could be used or allocated to Coeur d'Alene and result in a model

prediction for DO impact of 0.2 mg/L. Hayden's load is approximately 40 percent of Coeur d'Alene's load. This reallocation could be beneficial for Coeur d'Alene and current facility processing abilities. The loads are compared in Figure 1 below.

Figure 1.



Again, it is not clear why EPA's draft permit for Hayden allows for a discharge to the river during these critical months, rather than prohibiting the discharge during these low flow periods. EPA should consider the alternative of retaining the discharge prohibition in the 1999 Hayden permit and allocating these loads to the Coeur d'Alene model.

IV. Interim Effluent Limitations Compliance Schedule

A. Interim Limits

The Draft permit sets forth interim effluent limitations and a compliance schedule for ammonia, CBOD and total phosphorus. These apply to all of the final limits for these

parameters, except for ammonia during July, August and September. The compliance schedule is consistent with the DEQ's Section 401 water quality certification, except for ammonia pounds per day during the three summer months. The City supports the interim limits and compliance schedule in the Draft permit, but requests extension of the compliance schedule for ammonia concentrations during the months of July, August and September.

It would be arbitrary and capricious for EPA to vary the compliance schedule in the final state water quality certification. As the City requested in its January 11, 2007 letter to DEQ, the final certification should make clear that the compliance schedule for the DO-related parameters should not be less than nine years absent additional information. The technology to achieve the final DO-related effluent limits has never been applied on the scale of the City's treatment plant. Even with diligent efforts to achieve the final limits, it will reasonably take the full nine years to achieve compliance. See the City's letter to DEQ dated January 11, 2007, App. F, and *City of Coeur d'Alene Tertiary Phosphorus Removal Technology Pilot Study* (HDR 2007b), Appendix G.

B. Comments on Interim Limits and Compliance Schedule in the Draft permit

The City anticipates that it will be difficult to achieve the proposed limits within the time frames set in the draft permit. EPA should acknowledge DEQ's concerns and statements about the problems the City may have in meeting the effluent limits in the draft permit even with the proposed compliance schedules. As DEQ states in the water quality certification, the "goal of this compliance schedule is to give the permittee a reasonable amount of time to achieve the final effluent limits specified in Table 1 of the NPDES permit but also to accomplish compliance as soon as possible."

EPA should further recognize and address the following statement in the draft 401 certification:

> Idaho DEQ also recognizes that current technologies to achieve very low concentrations of phosphorus are not fully proven. Expensive new technologies are emerging and the picture may look very different five years from now. Another factor that may impact this long-range compliance schedule is the Spokane River DO TMDL, which is the basis for the final phosphorus limits (Table 1). It is yet to be approved by EPA. A significant modification or delay in approval of this DO TMDL may require modifications to this compliance schedule. If adjustments are necessary at the five-year mark when these permits will be reissued, DEQ will work closely with the permittee to make necessary refinements while keeping the overall goal of meeting the final effluent limits as soon as possible.

The permit should include clear reopener provisions to address the factors specified in DEQ's certification.

Appendix G, *Tertiary Phosphorus Removal Technology Pilot Study*, provides a comprehensive review of potential wastewater treatment technologies and assesses the

advantages and disadvantages of each. The uncertainties associated with larger scale implementation of these emerging technologies are described in this report.

The draft permit and fact sheet do not adequately explain the history and implications of EPA's complicated permit development process. EPA's decision to issue a draft permit to the City in disregard of the Washington DO TMDL has resulted in delays in the City's planning process for treatment plant upgrades. This decision has also resulted in confusion regarding the appropriate treatment control technologies and compliance timeframes for the City.

The 2004 Draft TMDL, *Draft Total Maximum Daily Load to Restore and Maintain Dissolved Oxygen in the Spokane River and Lake Spokane (Long Lake)* (Ecology 2004), App. H, contains proposed waste load allocations for the Idaho municipalities calculated and allocated in the same manner as the proposed allocations for Washington dischargers. The City had a reasonable expectation that any final TMDL for DO-related parameters in Washington State would contain similar waste load allocations and implementation approaches for the City's contributions.

The City delayed its ongoing facility planning process in order to participate in the development of the pending DO TMDL. The City did so in anticipation that waste load allocations and effluent limits derived from the TMDL would be applied to the City's treatment facility as permit requirements by EPA. The City's reasonable reliance on this process resulted in further delays in the treatment plant upgrade planning process to address DO related parameters.

Coeur d'Alene has been an active contributing participant in the Spokane River Collaboration since its inception in February 2005. The City was also a signatory to the UAA petition submitted to Ecology and the agreement between Ecology and the UAA petitioners to suspend finalization of the TMDL as well as to withdraw without prejudice the UAA petition pending completion of the collaborative process. The City retains its option to resubmit the UAA petition.

Prior to the 2005-2006 collaboration, Coeur d'Alene was also a signatory to the Memorandum of Agreement for the Spokane River Phosphorous Management Plan (SRPMP) 1989, App. I. EPA Region 10 was a party to this agreement, along with Idaho DEQ, Ecology and other Spokane River dischargers in Idaho and Washington. The agreement was endorsed and agreed to by the regulatory agencies. A complete history of the SRPMP and its implications to the current TMDL process for the Spokane River are contained in the City's March 3, 2006 comment letter to Ecology, attached as Appendix J.

The City believes that the SRPMP of 1989 is a binding agreement that has not been suspended by any of the parties who were signatories to the agreement, including EPA Region 10. In 1999, EPA based its decision to require 85% phosphorous removal on both the earlier Ecology phosphorous TMDL for Long Lake (now Lake Spokane) and the SRPMP. EPA should explain whether the SRPMP is or is not applicable to the City's NPDES permit and why EPA has abandoned the commitments made in that agreement.

It is also not clear why EPA has concluded that it may not apply TMDL waste load allocations, TMDL timeframes and other TMDL provisions to be contained in the pending revised Spokane River DO TMDL to the Idaho dischargers. Draft permit Fact Sheet, at 31. The City continues to believe that the adaptive management approach for DO in the Spokane River system is a better approach for equitably addressing DO point and nonpoint sources to the river.

The current schedule calls for a public issuance of the draft DO TMDL in late May or early June 2007. Regardless of the imminent release of the draft TMDL, EPA seems determined to release the Idaho draft permits ahead of the release of the draft TMDL and the final TMDL. DEQ has recognized in its draft Section 401 certification that the TMDL is likely to have a significant impact on the Idaho permits. The Idaho permit limits as proposed for phosphorous, CBOD5 and ammonia are calculated to meet the same Washington water quality standards that will be addressed in the TMDL for the same waterbody -- the Spokane River. EPA has also used the same assumptions regarding flows and loads and points of compliance assessment as are contained in the 2004 draft TMDL for DO. This approach seems contradictory to EPA's own policies endorsing watershed based planning.

The City requests that EPA provide a more complete and comprehensive explanation and rationale for its rejection of a regional TMDL for the Spokane River. Specifically, the City requests that EPA explain how the effluent limits in the proposed Draft permit might need to be revised by EPA if the TMDL ultimately contains different load allocation models for DO parameters.

It is also apparent that the Spokane River DO TMDL will be an adaptive management TMDL. EPA needs to explain how it will allow for adaptive limits in the City's permit to meet these Washington State water quality standards.

V. Effluent Limitations for Metals

A. Silver and Zinc Limits

The draft permit in Section I.B., Table 1, proposes numeric effluent limits for silver and zinc. The City requests that these limits be removed from the permit based on its own reasonable potential analysis that its discharges will not violate water quality criteria for these constituents.

B. Reasonable Potential Analysis

The averages and maximum observed values for both silver and zinc from the City discharge monitoring data from January 2000 through December 2006 are well below the concentrations that EPA used in its reasonable potential calculations. See Appendix K, D. Clark and M. Kasch, *Coeur d'Alene Draft NPDES Permit Metals Review* (HDR 2007c). HDR used the same reasonable potential calculations in Appendix C to

the Draft Fact Sheet and found that there is no reasonable potential for zinc to exceed water quality criteria and that there are significant questions as to whether silver concentrations in the treatment plant effluent have a potential to violate water quality criteria. *Id*. The maximum reported silver concentration was 8.68µg/L reported on June 11, 2002. This single concentration is controlling the reasonable potential analysis. If the next highest concentration is used – 7.65 µg/L on November 15, 2000 – there is no reasonable potential to exceed water quality standards. More important, the highest silver concentration reported since June 11, 2002 is 4.6 µg/L. The trend in the most recent silver effluent data is towards lower concentrations with less variability. The average of the 2006 effluent silver data is 0.66 µg/L and the maximum reported value is 3.3 µg/L.

C. Additional Comments and Questions

The City is submitting updated metals effluent data that should be used to recalculate zinc and silver effluent limits. This data is more reflective of the control technologies currently in place to address metals treatment. EPA should use more recent data to perform its reasonable potential analysis. The City has the following comments and questions regarding the reasonable potential analysis for metals in the Draft permit Fact Sheet.

1. EPA should provide a more complete explanation of how it calculated the proposed zinc and silver limits in the draft permit.

2. EPA states in the Draft Fact Sheet, at 12, that it has made a new determination of the need for an effluent limit for zinc "due to an error in the calculation of the zinc effluent limits in the 2004 modification of the permit." The re-calculation resulted in more stringent effluent limits for zinc. EPA should explain how the re-calculation differs from the calculation contained used in the 2004 permit modification assessment and whether it revised its assumptions about anticipated zinc loadings or hardness of the receiving water. It is impossible to conduct a meaningful assessment of the new proposed zinc limits without this information.

3. EPA correctly noted in the Draft Fact Sheet, at 12, that a new TMDL is still pending for metals in the Idaho reach of the Spokane River following a court ruling invalidating the previous TMDL. EPA should explain how the permit terms allow for revised permit limits to meet load allocations that will be set in the future by any subsequent TMDL adopted by Idaho.

VI. Permit should include Nonpoint Source Phosphorous Offset Conditions

A. Phosphorus Management

The Draft permit contains a requirement for a phosphorous management plan in section II.C. It should also include conditions that would allow the City to develop offsets for phosphorous loads from nonpoint sources (NPS) in the Spokane River watershed. These conditions that should clearly allow for reductions in phosphorous

limits and related DO limits for ammonia and CBOD5 based on NPS controls implemented by the City and allow the permit to be reopened to include less stringent limits for phosphorous and related DO limits for ammonia and CBOD5 as a result of the City's implementation of NPS controls.

B. NPS Phosphorus Reductions and Effluent Trading will be Essential Tools for Attaining DO Goals in the Spokane River

EPA has provided grant funding for dischargers in the Spokane River watershed to identify NPS phosphorous reductions measures. A copy of the Scope of Work Bi-State Non-Point Source Study-Phase I Spokane River Dissolved Oxygen TMDL is attached as Appendix L.

The basic approach for creating an effluent trading program for phosphorous is described in the introduction to the scope of work:

> The Spokane River Dissolved Oxygen (DO) Total Maximum Daily Load (TMDL) process has established a phosphorus target of 10 µg/L, which is expected to reduce excessive algal productivity that causes DO concentrations to fall below the water quality standard. The Foundational Concepts for the Spokane River DO TMDL will begin guiding TMDL implementation, and meeting the phosphorus target will require a combination of improved point source wastewater treatment technology and reduced nonpoint source (NPS) pollutant loads.
>
> Treatment technology currently cannot reliably meet the waste load target of 10 µg/L, and the difference between what current technologies can achieve and the waste load target is referred to as "the Delta." The Foundational Concepts requires that National Pollutant Discharge Elimination System (NPDES) permit holders develop a Delta Elimination Plan, and states that they may participate in a regional NPS program. If that participation demonstrates NPS phosphorus load reductions to the river, NPDES permit holders will be recognized as contributing toward achieving phosphorus waste load targets. As such, this Bi-State NPS study is a necessary first step towards demonstrating NPS phosphorus load reductions.

App. L at 1.

EPA and the Washington dischargers clearly intend that the offset program be a bi-state effort involving both Washington and Idaho jurisdictions including the City of Coeur d'Alene. The Scope of Work includes an assessment of NPS controls that might be implemented to provide phosphorous loading offsets. These included NPS controls in Idaho. App. L at 3.

Ecology has issued a Foundational Concepts document in anticipation of a final TMDL for DO for the Spokane River. The implementation of the TMDL would allow

for NPS offsets to be developed and implemented in order to offset current and future phosphorous and related DO permit requirements for affected Washington permittees. It is important that the Idaho permits, including the permit for the City, be treated equitably with the Washington municipal dischargers. The City's permit should contain appropriate provisions to allow for the development, implementation of NPS controls and related revisions to offset permit effluent limits in a manner similar to that recognized by EPA and Ecology in the Washington permits.

EPA regulations and Final Water Quality Trading Policy allow for offsets. See 40 C.F.R. § 122.4(i). Under this provision, there is broad authority to develop appropriate solutions to water quality impairments. That authority specifically includes the authority to develop area-wide programs to alleviate existing pollution. The EPA Water Final Water Quality Trading Policy (Jan. 13, 2003) further expresses support for effluent trading because it "allows one source to meet its regulatory obligations by using pollutant reductions created by another source that has lower pollution control costs." EPA specifically "supports trading that involves nutrients (e.g., total phosphorus and total nitrogen) or sediment loads." See also *In re Carlotta Copper Co.*, No. 00-23 & 02-06, 2004 WL 3214473 (EAB Sept. 30, 2004)(discharge permit required permittee to offset discharge of copper by remediating an old mining site on the same creek).

EPA should accordingly consider, consistent with 40 C.F.R. § 122.4(i), whether the City can achieve compliance with water quality standards where its discharges are offset by reductions from other sources so that there is a net decrease in the amount of pollution entering the water. Pollutant trading is also recognized in Idaho's Water Quality Standards at IDAPA 58.01.02.054.06. Currently, DEQ's policy is to allow for pollutant trading as a means to meet TMDLs, thus restoring water quality-limited waterbodies to compliance with water quality standards.

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B. City of Coeur d'Alene 2004 Permit Modification Fact Sheet
C. City of Coeur d'Alene 2004 Permit Modification Response to Comments
D. Draft Permit Fact Sheet for Hayden Area Regional Sewer Board, 2007
E. HDA (Clark & Kasch) Memo re: Coeur d'Alene Draft NPDES Permit: Ammonia, 2007
F. Letter from Sid Fredrickson to Roger Tinkey, DEQ, January 11, 2007
G. City of Coeur d'Alene Tertiary Phosphorus Removal Technology Pilot Study, HDR 2007
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L. Scope of Work Bi-State Nonpoint Source Study – Phase I Spokane River Dissolved Oxygen TMDL, 2007